



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/525,127

04/05/2006

Roy Garvin

18880-002US1

2941

7590

09/18/2009

Fish & Richardson
Suite 3300
60 South Sixth Street
Minneapolis, MN 55402

EXAMINER

BASS, DIRK R

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

09/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/525,127 | Applicant(s) GARVIN ET AL. | |
| | Examiner DIRK BASS | Art Unit 1797 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The request for continued examination, filed September 1, 2009 is acknowledged. Claims 1 and 16 are amended. Claims 1-19 are pending and further considered on the merits.

Response to Amendment

2. In light of applicant's amendment of claims 1 and 16, the examiner modifies the 35 U.S.C. 103(a) rejections of claims 1-19 in view of Kassis et al., US 4534483.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. **Claims 1-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman, US 5225165 (Perlman) in view of Kassis et al., US 4534483 (Kassis).

Regarding claims 1 and 16, Perlman discloses a microtube comprising;

a. A container having an open end defining an opening for receiving materials to be contained ("upper opening 15", fig. 5), and a closed end (see bottom of "container 11", fig. 1); and

a. A lid adapted to make closing contact with the opening of the container ("lid 14", fig. 1-5), wherein the lid is provided with a flange extending outwardly therefrom ("lid extension 24", fig. 1-5), and arranged to move towards the closed end of the container upon application of a mechanical force to a surface of the flange so as to remove the closing contact, whereby the container is opened (col. 2, l. 30-39).

Perlman fails to explicitly disclose a microtube wherein the flange is positioned within the half of the lid proximal to the hinge, said flange extending upwardly at an angle of about 90 degrees.

Kassis discloses a cap enclosure device (abstract) having a flange (see "tab 40", fig. 6) positioned within the half of said cap proximal to the hinge (see "strip 38", fig. 6), said flange extending upwardly at an angle of about 90 degrees (implicitly disclosed in

Art Unit: 1797

figure 6). Kassis further discloses that using the disclosed cap enclosure device allows quick and convenient filling of a container while minimizing the chance of contamination (col. 1, l. 30-35).

At the time of invention, it would have been obvious to one skilled in the art to combine the specific flange embodiment of Kassis with the microtube of Perlman in order to allow quick and convenient filling of a microtube while minimizing the chance of contamination.

Regarding claims 2-3, Perlman in view of Kassis discloses a microtube which is a microcentrifuge tube (col. 2, l. 20-25) suitable for holding relatively small volumes of material, wherein the relatively small volume of material is a volume up to 4 ml. It is implicit in Perlman in view of Kassis that the claimed microcentrifuge tube is capable of holding volumes between .4 and 2 ml. as related to the general definition of a microcentrifuge tube given in the background of the invention (col. 1, l. 9-14).

Regarding claim 4, Perlman in view of Kassis discloses a microtube which is a microcentrifuge tube (col. 2, l. 20-25).

Regarding claim 5, Perlman in view of Kassis discloses a microtube wherein the lid is adapted to make a sealing contact with the opening of the container (col. 6, l. 7-14).

Regarding claim 6, Perlman in view of Kassis discloses a microtube wherein the lid is connected to the container by a connecting means (see "lid hinge 16", fig. 1-5).

Regarding claim 7, Perlman in view of Kassis discloses a microtube wherein the connecting means provides for relative movement between the lid/flange and the container (fig. 5).

Regarding claim 8, Perlman in view of Kassis discloses a microtube wherein the connecting means is a hinge (see "lid hinge 16", fig. 1-5).

Regarding claim 9, Perlman in view of Kassis discloses a microtube wherein the connecting means comprises a hinge which may be fixed to the upper perimeter wall of the container defining the opening and to the lower surface of the lid, and about which the lid/flange and container can move (see "lid hinge 16", fig. 5).

Regarding claim 10, Perlman in view of Kassis discloses a microtube wherein the lid is adapted such that the flange extends outwardly from a position adjacent to or in axial alignment with the connection means (see “lid extension 24”, fig. 5).

Regarding claim 11, Perlman in view of Kassis discloses a microtube wherein the flange extends upwardly (see “lid extension 24”, fig. 5).

Regarding claims 12-13, Perlman in view of Kassis discloses a microtube which is constructed of a plastics material wherein the plastics material is laboratory grade injection molded plastic (see “virgin polypropylene or polyethylene”, col. 5, l. 67 – col. 6, l. 4).

Regarding claim 14, Perlman in view of Kassis discloses a microtube wherein the lid and flange parts of the tube are made as an integral part of the container (fig. 5).

Regarding claim 15, Perlman in view of Kassis discloses a microtube wherein the flange is adapted for use as a handle (see “lid extension”, col. 3, l. 49-52).

Regarding claim 17, Perlman in view of Kassis discloses a storage system/vessel comprising one or more microtubes (col. 4, l. 67 – col. 5, l. 9 and col. 5, l. 65-66).

Regarding claim 18, Perlman in view of Kassis discloses a storage system wherein the storage system/vessel is a rack, a reaction vessel, or a centrifuge (col. 4, l. 67 – col. 5, l. 9 and col. 5, l. 65-66).

Regarding claim 19, Perlman in view of Kassis discloses a method of using a microtube for the storage of material, as reaction vessels, or in centrifugation (col. 4, l. 67 – col. 5, l. 9 and col. 5, l. 65-66).

Response to Arguments

5. Applicant's arguments with respect to claims 1 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIRK BASS whose telephone number is (571) 270-7370. The examiner can normally be reached on Mon - Fri (9am-4pm).

Art Unit: 1797

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571) 272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/17/2009

/Yelena G. Gakh/
Primary Examiner, Art Unit 1797

/DRB/
Dirk R. Bass